1) $a_n + a_{n-1} - 12 a_{n-2} = 0$

$x^2 + x - 12 = 0$

$(x+4)(x-3)$

$x = -4 \quad x = 3$

solusi homogen $b_n^{(h)} = A_1 x_1^n + A_2 x_2^n$

$= A_1 (-4)^n + A_2 3^n$

∴ d. $a_n^{(h)} = A_1 (-4)^n + A_2 3^n$

2) a: $2a_{n-1} + 2a_{n-4} = 2^n$

3) c. solusi non homogen dan Partikuler

4.) $Y_n = 2Y_{n-1} + Y_{n-2}$; $Y_3 = 5$ dan $Y_5 = 29$

$Y_7 = ?$

$Y_4 = 2Y_3 + Y_2$

$= 2(5) + 2$

$= 12$

$Y_6 = 2Y_5 + Y_4$

$= 2(29) + 12$

$= 70$

$Y_7 = 2Y_6 + Y_5$

$= 2(70) + 29$

$= 169$

b. 169

No.

Date

5. $Y_9 = ?$

$Y_9 = 2Y_8 + Y_7$
$= 2(408) + 169$
$= 985$

$Y_8 = 2Y_7 + Y_6$
$= 2(169) + 70$
$= 408$

C. 985

6. b. $x_n - x_{n-5} = 5n + 4$

7. a. Node dan sisi

8. d. Rucas

9. a. order

10. b. size

11. d. Derajat

12. b. simple graph

13. C. Ruang a_4 dan a_5

14. a. a_3

15. d. 9

16. b. 14

17. a. 9

18. C. 7

19. b. sirkuit

20. a. $a_n^{(k)} = 3n - 6$